REMARKS

In the Office Action dated March 17, 2003, the Examiner rejected claims 1-40 under 35 U.S. C. § 103(a) as being unpatentable over Apte et al. (U.S. Patent No. 6,269,373).

By this amendment, Applicant has canceled claims 3 and 7, without prejudice or disclaimer, and amended claims 1, 5, 8, 10, 16, 18, 32, 34, 36, 37, and 40. In particular, claim 1 was amended to include the recitations of canceled claim 3. Based on these amendments and the following remarks, Applicant respectfully traverses the rejection of claims 1-2, 4-6, and 8-40 under U.S.C. § 103(a).

Apte et al. teaches a distributed system that allows a client to invoke methods on server objects and receive results from the invocation. In operation, the client sends an object-oriented programming call to a server object, which processes the request by invoking methods identified in the client request. The server object collects response from the invocation and returns them to the client.

In contrast, claim 1 recites receiving an SQL call, mapping the SQL call to a general computer language programming call of a computer application, and executing the programming call to invoke functions of the computer application that correspond to the functions specified by the SQL call. Although Apte et al. states that a client may send calls to a server object to "access a database" (see col. 6, lines 30-35), the client calls are not database structured calls. Instead, the client calls are method invocation requests that are directed to a server object. The Examiner asserts that Apte et al.'s JDBC SQL interfaces used by the server objects teach SQL calls, as recited in claim 1 (see Office Action, page 4, lines 9-12). Applicant disagrees. As mentioned above, the SQL interface is used by a server object to access relational databases. These server

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objects do not receive SQL calls from a client, but instead use SQL interfaces to obtain information from a database. Therefore, the client does not send, and the server does not receive, SQL calls that are mapped to a general computer language programming call. Instead, the client calls are object-oriented programming calls. For example, Apte et al. describes how a client locates proxy class objects and uses remote method invocation techniques to invoke a business method on an EJB running on a CORBA server (see Fig. 8). These client based processes do not include providing an SQL call to the server.

Further, there is no infrastructure for Apte et al. to map an SQL call received by the CORBA server. Apte et al. describes operations associated with the interactions between Object Request Brokers (ORBs) and object-oriented invocation techniques for processing remote method invocations. The reference fails to show any capabilities for mapping an SQL call received from the client in a manner consistent with the process steps recited in claim 1.

Additionally, the Examiner admits that Apte et al. does not teach mapping a database call. To compensate for this shortcoming, the Examiner asserts that mapping references to a CORBA server containing EJBs is equivalent to the claimed mapping step of claim 1. Applicant disagrees. As explained, the object-oriented programming techniques of generating and receiving remote method and/or object requests from a client, as described by Apte et al., is not the same as receiving and mapping an SQL call, as recited in claim 1.

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Because Apte et al. fails to teach or suggest the recitations of claim 1, Applicant respectfully requests that the rejection of this claim under 35 U.S.C. § 103(a) be withdrawn and the claim allowed.

Claims 2, 4-6, and 8-18 depend from claim 1. As explained, claim 1 is distinguishable from Apte et al. Accordingly, dependent claims 2, 4-6, and 8-18 are also distinguishable from Apte et al. for at least the same reasons in connection with claim 1. Further, Apte et al. fails to teach or suggest the recitations of these claims. For example, Apte et al. does not teach or suggest analyzing components to determine the correspondence between database elements and the component elements and creating a database bridge map that identifies the correspondence, as recited in claim 9. The operations described in col. 6, lines 31-37 of Apte et al., cited by the Examiner, merely describe well known remote method invocation techniques. Apte et al. does not mention creating any type of map, much less one that identifies a correspondence between elements, as recited in claim 9. Moreover, Apte et al. does not utilize such a map to map the SQL call to a general programming language call, as recited in claim 10.

Because Apte et al. does not teach or suggest the recitations of claims 2, 4-6, and 8-18, Applicant respectfully requests that the rejection of these claims under 35 U.S.C. § 103(a) be withdrawn and the claims allowed.

Further, Apte et al. does not teach or suggest, at least, receiving and converting a database protocol command, as recited in claim 19. As explained with respect to claim 1, Apte et al. describes a distributed system that uses remote method invocation techniques for invocating methods from a CORBA server containing EJB objects. The

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system does not teach or suggest a client sending, or a server receiving, database protocol commands. Because the business method calls taught by Apte et al. are not database protocol commands, but instead are object-oriented programming calls, the reference cannot teach or suggest the recitations of claim 19. Accordingly, Applicant respectfully requests that the rejection of claim 19 under 35 U.S.C. § 103(a) be withdrawn and the claim allowed.

Claims 20-25 depend from claim 19. As explained, claim 19 is distinguishable from Apte et al. Accordingly, dependent claims 20-25 are also distinguishable from Apte et al. for at least the same reasons in connection with claim 19, and Applicant respectfully requests that the rejection of these claims under 35 U.S.C. § 103(a) be withdrawn and the claims allowed.

Claim 26 includes recitations similar to those of claim 19 (e.g., database protocol command). As explained, claim 19 is distinguishable from Apte et al. Accordingly, dependent claim 26 is also distinguishable from Apte et al. for at least the same reasons in connection with claim 19. Further, Apte et al. fails to teach or suggest exposing software components, in a first computer programming language, of an application server as database elements and converting the database protocol command to a command syntax of the first programming language corresponding to at least a selected one of said software components, as recited in the claim. The configuration described with respect to Fig. 4 of Apte et al. does not teach or even mention converting database protocol commands to a command syntax of any language, much less a programming language corresponding to a selected one of the software components exposed as database elements. The only teaching Apte et al. described in column 6, lines 46-51

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(cited by the Examiner) is that of server objects that use JDBC SQL interfaces to access relational databases. Accordingly, Apte et al. does not teach or suggest the recitations of claim 26 and Applicant requests that the rejection of this claim under 35 U.S.C. § 103(a) be withdrawn and the claim allowed.

Claims 27-31 depend from claim 26. As explained, claim 26 is distinguishable from Apte et al. Accordingly, dependent claims 27-31 are also distinguishable from Apte et al. for at least the same reasons in connection with claim 26, and Applicant respectfully requests that the rejection of these claims under 35 U.S.C. § 103(a) be withdrawn and the claims allowed.

Apte et al. also fails to teach or suggest a system including a command converter operative to convert a first database programming language call to a general computer programming language call and is operative to generate a second database programming language call that corresponds to the first database programming language call, to access a database, as recited in claim 32. As explained, the calls generated by the client in Apte et al. are not database programming language calls, but instead are object-oriented programming type calls for invocating remote methods from a server. Also, Apte et al. does not convert the database programming calls to a general computer programming language, as recited in the claim. Accordingly, Apte et al. does not teach or suggest the recitations of claim 32 and Applicant requests that the rejection of this claim under 35 U.S.C. § 103(a) be withdrawn and the claim allowed.

In view of the foregoing remarks, Applicant submits that this claimed invention, is neither anticipated nor rendered obvious in view of the prior art references cited against

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this application. Applicant therefore request the Examiner's reconsideration and reexamination of the application and the timely allowance of claims 1-2, 4-6, and 8-40.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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By: _____

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